



California Morbidity

Sharps Injuries Surveillance and Prevention Program (SHARPS) A New Department of Health Services Program

Senate Bill (SB) 2005, passed by the California Legislature in September 1996, will establish a new program for the surveillance of injuries to healthcare workers from sharp medical devices ("sharps") based in the California Department of Health Services. This article reviews the basis for the legislation and plans for the program.

There are over 700,000 health care workers in California. Many of these are at risk of occupational exposure to life-threatening bloodborne pathogens, such as hepatitis B virus (HBV), hepatitis C (HCV), and human immunodeficiency virus (HIV). The incidence of occupational infection from these viruses in California is unknown but, extrapolating from available nationwide data, it is estimated to be approximately 1200 per year for HBV (based on pre-vaccination data, so that this may be an overestimate) and 6 per year for HIV. An estimated 80% of the occupational blood exposures are due to needlestick injuries. The risk of infection from a hollow-bore needlestick involving contaminated blood is estimated to be between 6-30% for HBV and 0.3-0.4% for HIV. However, hospital surveys indicate that over one third of the health care workers do not report needlesticks or other blood exposures. Clearly, California health care workers are exposed to deadly bloodborne infectious agents, on the job. The actual extent of the problem and what can be done to minimize it remains elusive.

Most health care facilities have implemented infection control plans and make efforts to see that they are followed. Most keep reasonably good internal records of sharps injuries and exposure incidents. Some have conducted in-house trials of safety-enhanced sharps devices and have consequently made changes in which products they use. What is problematic is that each health care facility is taking these measures independently without benefiting from the experiences of others. How health care facilities determine which sharps devices are more likely to cause injuries and which are the safest to use is a daunting task, given the lack of relevant data.

Medical device manufacturers are marketing sharps devices (e.g. hypodermic needles, IV connectors, etc.) that have safety-enhanced features. It is a rapidly developing segment of the market and new products with new safety features are frequently introduced. Individual institutional end users have limited efficacy in encouraging manufacturers, through market pressure, to design and produce safer sharps devices to meet their specific needs.

The intent of SB 2005 was to generate data sufficient to address the concerns noted above. Implementation of the act was delegated to the Departments of Health Services (DHS) and Industrial Relations (DIR). They are mandated to establish a three-year pilot surveillance study of sharps injuries and exposure incidents. Hospitals, skilled nursing facilities, and home health agencies will be recruited to participate in the study. Data collected will include the incidence of sharps injuries and the types and brands of the sharps devices involved in each reported exposure (where it is known). Also, the facilities' recordkeeping practices will be verified during inspections conducted under provisions of the California Medical Waste Management Act. The surveillance study will be conducted by the Hazard Evaluation System and Information Service (HESIS), which is a section of DHS' s Occupational Health Branch (OHB).

The data will be published in a final report that is due December 31, 1999. It will be distributed to all licensed health facilities and home health agencies, and DIR' s Division of Occupational Safety and Health (Cal/OSHA). It will also be made available to other persons or entities upon request. If you would like to arrange to volunteer your hospital, skilled nursing facility, or home health agency as a surveillance study participant, or to offer other assistance, or request any information related to this study, contact: Jim Cone, MD. DHS/OHB/HESIS/SHARPS, 2151 Berkeley Way, Annex 11, Berkeley, CA 94704-1011, (510) 540-2194 phone, (510) 540-3472 fax.